CLAIMS

1. A structure comprising a first area including a plurality of pores which have a first period and a second area including a plurality of pores which have a second period, characterized in that the first area and the second area share a plurality of pores.

2. A structure comprising periodic array structures of pores formed in an anodized oxide film, wherein a plurality of types of periodic array structures are arranged adjacent to one another.

3. The structure according to claim 2, wherein a plurality of types of the periodic array structures are arranged adjacent to one another and there are at least two pores in the shared region which constitutes the boundary thereof.

4. The structure according to claim 2, wherein a plurality of types of the periodic array structures have at least one pore in addition to the pores in the shared region.

5. The structure according to claim 2, wherein a plurality of types of the periodic array

structures each have equal distances between first proximate pores or have the distance between first proximate pores on one side equal to the distance between second proximate pores on the other side or have equal distances between second proximate pores.

6. The structure according to claim 5, wherein the distance between the most proximate pores of a plurality of types of the periodic array structures is 0.75B to 1.5B where B is a numerical value [nm] included within the range between a maximum value and a minimum value of the distance between the most proximate pores of the above described plurality of types of periodic array structures.

7. The structure according to claim 2, wherein said periodic array structures is a rectangular lattice, tetragonal lattice, hexagonal lattice, graphite-shaped lattice or parallelogram lattice.

8. The structure according to claim 2, wherein said anodized oxide film is comprised of aluminum as a principal component.

9. The structure according to claim 2, wherein at least one of said pores includes a filler.

10. The structure according to claim 9, wherein said filler is a dielectric having a dielectric constant different from that of said anodized oxide film, semiconductor, magnetic material or light-emitting material.

11. An optical device wherein said pores of the structure according to claim 2 are filled with a dielectric having dielectric constant different from that of said anodized oxide film.

12. A light-emitting device wherein said pores of the structure according to claim 2 are filled with a light-emitting material.

13. A magnetic device wherein said pores of the structure according to claim 2 are filled with a magnetic material.

14. A magnetic recording medium comprising:

a data area where pores filled with said magnetic material to record information; and

a servo area where track positions are detected,

wherein the structure made up of simple periodic arrays of said pores differs between said data area and said servo area.

15. The magnetic recording medium according to claim 14, wherein at least one pore in said servo area is shifted by half a period with respect to the period of pores perpendicular to the track direction in the data area.

16. The magnetic recording medium according to claim 14, wherein said servo area is constructed of at least two types of periodic array structures.

17. A method of manufacturing a structure in which a plurality of pore periodic array structures formed in an anodized oxide film having different periods are arranged adjacent to one another, comprising:

(1) a step of forming pore starting points made up of a plurality of types of periodic arrays on the surface of a substrate comprised of aluminum as a principal component; and

(2) a step of anodizing said substrate simultaneously at the same anodization voltage.

18. The method of manufacturing a structure according to claim 17, wherein said plurality of periodic array structures having different periods are arranged adjacent to one another and there are at least two pores in the shared region which is the

boundary thereof.

19. The method of manufacturing a structure according to claim 17, wherein said plurality of periodic array structures having different periods have at least one pore in addition to the pores in said shared region.

20. The method of manufacturing a structure according to claim 17, wherein a voltage applied during anodization of the structure of said plurality of periodic arrays is A [V] (B [nm] = A [V]/2.5 [V/nm], where B is a numerical value included within the range between a maximum value and a minimum value of the distance between the most proximate pores included in said plurality of types of periodic array structures).